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15th February 2016

The Bureau of Steel Manufacturers of Australia (BOSMA) makes the following submission to the Senate Inquiry into the future of Australia's steel industry - closing date for submissions 15 February 2016.

Terms of Reference:

On 26 November 2015, the Senate referred the following matters to the Senate Economic References Committee for inquiry and report by the last sitting day in June 2016 (30 June 2016):

- a) the future sustainability of Australia's strategically vital steel industry and its supply chain; and*
- b) any other related matters.*

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1. The Australian Steel industry structure

BOSMA, Arrium/OneSteel & BlueScope

The Bureau of Steel Manufacturers of Australia (BOSMA) is the peak body representing the Australian steel manufacturers OneSteel, an Arrium business, and BlueScope Steel. BOSMA members supply the majority of steel mill products used in the Australian domestic market.

The two biggest market sectors for steel used in Australia are steel reinforcement and associated steels used in concrete buildings and structures, and structural steel and associated steels used in steel framed buildings and structures.

The Steel Reinforcement Institute of Australia (SRIA) is the peak body for the reinforcing steel manufacture, distribution and processing value chain in Australia, and the Australian Steel Institute (ASI) is the peak body for the structural and flat steel manufacturing, distribution and fabrication value chain in Australia.

Employment, investment and value add

Arrium and BlueScope are companies with Australian and international operations employing around 17,000 people, and generate annual revenue of approximately \$15 billion. OneSteel and BlueScope employ around 12,000 people in Australia while total employment in the steel sector, both upstream and downstream, was estimated to be over 100,000 in Australia (ABS 2011). Their steel businesses operate

across several hundred sites, servicing customers in a variety of industries, including the building & construction, manufacturing, infrastructure and agriculture sectors.

BlueScope and Arrium currently have over \$6 billion in capital invested in Australia and have a proud history of manufacturing quality steel products.

National, regional and international issues,

Steel is a fundamental building block of any modern society and as such, despite significant trade exposure, a domestic steel manufacturing capability is an important and strategically valuable asset.

Many steelmaking facilities are also located in regional centres, and form the basis for the area's economy. One example of this is Arrium's Whyalla Steelworks in South Australia, which provides jobs to 25 per cent of Whyalla's workforce and makes up 35 per cent of the town's economy¹. These figures do not include the flow-on jobs in sectors such as education, health and hospitality, which rely on the Steelworks maintaining a core presence in the community.

Similarly the Illawarra region depends heavily on BlueScope's investment in Port Kembla.

Recent and expected changes

Since the onset of the global financial crisis, excess global steel production capacity has led to a glut of steel, which has placed downward pressure on prices and margins.

In light of this overcapacity, BlueScope and Arrium have undertaken significant structural transformation; including halving BlueScope's commodity steel production in Australia by shutting one of BlueScope's two blast furnaces. Arrium has made significant cost reductions to improve competitiveness in the same period. Further cost reductions in Port Kembla and Whyalla are currently in progress.

Local & world-capacities

There is now about 1.8 billion tonnes of steel production capacity in the world. By far the largest country producer is China, which now has over 1.1 billion tonnes of capacity.

The amount of overcapacity in the global steel market has nearly doubled since the GFC to 700mtpa.(CRU Arrium paper) Approximately a third of this amount rests with China, due largely to Chinese Government policies that have continued to encourage increases in production even as the country's domestic demand slowed. In the last ten years, China has moved from being a net importer to a net exporter of steel, and last year its exports rose by 51 per cent to reach a total of 93.8 million tonnes

Australia is a relative 'minnow', with total production capacity of approximately 5 million tonnes, or about 0.3 per cent of global capacity.

¹ Deloitte Arrium paper

Economy flow on effects

The generally recognised core reasons for maintaining a domestic industry are economic development, preservation of employment, national security and, increasingly, environmental protection. A domestic industry also provides an important mechanism for value adding to domestic mineral resources such as iron ore and coking coal, reduces the dependency on imports for the nation's infrastructure and construction needs, and develops manufacturing and innovation skills to support industrial and economic development.

It has been estimated that every dollar of steel production generates an additional gross output of \$2.30 across the wider economy.²

2. Sustainability of the Australian steel supply chain

Fair trade/anti-dumping

BOSMA members support 'free and fair' trade – the lowering of tariff and non-tariff barriers within a rules-based trading system – and we recognise the economic benefits of bilateral and multilateral free trade agreements. The concept of 'fair' trade includes adherence to Australia's World Trade Organisation-compliant anti-dumping laws, as well as WTO-compliant policies to support the development of domestic industry.

The glut of steel overcapacity on world markets has led to most developed countries imposing ant-dumping duties in recent times.

The BOSMA submission No. 18 on 7th October 2015 to the Productivity Commission Research Paper — Developments in Anti-dumping and Countervailing ('Anti-dumping') Arrangements - goes into much more detail on this subject.

The anti-dumping system has been much improved in recent times, but the following further requested improvements are detailed in the submission:

- i) Circumvention Activity penalties
- ii) Ad valorem or combination of duties
- iii) Exemption provisions under the Dumping duty Act
- iv) Measurement of effectiveness of duties imposed
- v) Non-verification of exporter data
- vi) Model matching for fair comparison purposes
- vii) Profit in s.269TAC(2)(c) constructed normal values
- viii) Time limits for applications
- ix) Retrospective approach
- x) Revision of application form to encourage downstream applicants to apply
- xi) Lesser duty rule

² BIS Shrapnel The benefits of a local procurement policy for local steel in government construction', September 2015.p 11

Non-compliant products

The sale of non-conforming building products in Australia is a form of unfair trade, by which companies whose products do not conform to Standards and building requirements undermine the viability of those firms whose products do conform, while imposing additional and unnecessary costs on the economy, and creating unacceptable risks to public safety. This is not a level playing field.

In BOSMA's opinion non-compliant steel being supplied into construction is part of an overall problem in establishing product conformity to the Australian Standards specified.

There is evidence from a range of sources that some steels being supplied into projects are non-compliant with specifications and standards. There needs to be a better overall product conformity system and in the case of high risk construction safety related products like steel, there needs to be Government support.

The BOSMA position is that regardless of source of product, members of the supply chain must ensure that the steel products used in risk critical structural applications have been supplied from steel mill manufacturers which have Third Party Certification of their manufacturing output, demonstrating compliance with the relevant Standards. This is particularly important for high risk structural applications in construction where steel mill products are relied upon for the structural integrity of the building.

BOSMA is not calling for increased regulation but support from Government of the systems already in place driven by industry need and with a proven track record. Frameworks such as this are well understood and accepted by competent steel mills worldwide, as Third Party Certificates of Product Compliance are already for them a low cost "reduced red tape" method of demonstrating compliance to Standards and correct test certificate data and identifying markings.

The BOSMA submission to the Senate Enquiry into non-conforming building products 3rd August 2015 gives much more detail on this subject.

Climate change

We support measures to reduce greenhouse gas (GHG) emissions on a global basis, in line with the commitments in the United Nations Framework Convention on Climate Change (UNFCCC).

In establishing Australia's national targets, and policy measures to achieve these targets, we believe it is very important to consider Australia's unique national circumstances, including:

- Australia's natural resource endowment and its competitive position as a leading mineral and carbon-based energy exporter;
- Australia's unusual position as a developed country, located in a region that is principally comprised of developing countries that are both trading partners and, in many cases, competitors;
- Australia's high population growth rate amongst developed economies.

- The role of emissions-intensive trade-exposed industries as important exporters and regional employers; and
- The fact that many of these EITE industries compete principally with competitors in developing countries. Unlike Australia, many of these developing countries have adopted targets that do not require absolute reductions in emissions compared to historical levels; nor have they generally imposed direct carbon costs on their steel industries.

Policy to achieve Australia's emissions targets must not be 'one size fits all'. It must take account of our national circumstances and the differing technical and financial capabilities of each sector to reduce its emissions, as well as the sources of each sector's trade competition.

Competitiveness

In spite of the global situation, BOSMA members have continued to improve competitiveness and support local market shares and volumes.

Arrium has continued to supply reliable, quality-conforming products to the Australian industry, with a focus on providing the right product at the right place at the right time. Arrium has worked to maintain competitive pricing, even though this is marked against products that are likely dumped. To achieve this, since 2009 Arrium have reduced the total delivered cost of steel per tonne by 24per cent after inflation, as well as improving productivity and reducing margins wherever possible.

Equally, Arrium's mix of Electric Arc Furnaces (EAFs) in NSW and Victoria and the blast furnace at Whyalla means that we can balance production, increasing or reducing the use of the EAFs to compensate for the fact that the blast furnace must continually run at close to total capacity.³

Arrium has identified a cost reduction and efficiency target of \$100m for its Whyalla operations for the 2016 financial year. To date, approximately \$60m of this has been identified, and unfortunately has included approximately 200 job losses, with an additional 50 losses likely from contractors.

In the last financial year (FY2015) BlueScope returned to profitability and payment of a dividend. All of BlueScope's global businesses - apart from its upstream commodity steelmaking operations in Australia and New Zealand - were profitable. The company's downstream, value-added Australian coating and painting operations, which produce market-leading brands such as COLORBOND® steel, based on Australian innovation and intellectual property, were also significant profit generators.

BlueScope has recently taken action to reduce costs at its Australian steelmaking operations by approximately \$200 million, in order to achieve cashflow breakeven on hot rolled coil production given current global steel prices and spreads.

3. Innovation in the Australian steel industry

³ The structure of a blast furnace, which burns coke or other fuel to smelt iron ore, means that it must run at full capacity once started, often operating for 10-plus years at a stretch. EAFs, on the other hand, use electric current to melt scrap, and can be ramped up or down as required.

New product research & development, energy reduction & recycling

Both Arrium and BlueScope continue to invest in improving processes and capability. To this end, Arrium has formed significant partnerships with universities and other research centres, and collaborates on a number of research projects, education programs, academic articles and information-sharing events.

A particular focus for many of these collaborations is energy efficiency and reducing reliance on fossil fuels. One example, between the University of New South Wales (UNSW) and Arrium OneSteel (OneSteel), considered the use of alternate carbon sources in Electric Arc Furnaces to reduce emissions and consumption of traditional fuels such as coke and natural gas. This project considered whether end-of-life rubber tyres and post-consumer plastics could be an acceptable substitute, as they are not only a good source of carbon but their use in steelmaking provides a possible solution to the environmental challenge of disposing of these waste materials.

In close co-operation with the UNSW, OneSteel developed and commercialised Polymer Injection Technology (PIT), which enables EAFs to inject a blend of coke and rubber in place of pure coke, resulting in improved furnace efficiency. OneSteel has been using PIT as a standard practice since 2008 at its Sydney Steel Mill and Laverton Steel Mill in more than 84,000 heats, consuming over 2.4 million recycled tyres in the process. PIT has been granted patent protection in most major industrial countries.

It is also an example of leading edge steelmaking technology being exported to the world. Since 2011, the technology has been licensed, and implemented, in steel plants in Thailand, UK, South Korea and Norway, and OneSteel is in negotiations to license the technology in many other plants in Europe, the Americas, the Middle East and Asia. The technology provides a significant market for used tyres which many countries list stockpiles of end of life tyres as a significant environmental issue, as well as cost reductions and environmental benefits to the world steel industry.

Essentially, this project has provided innovative technology that reduces electrical energy consumption, reduces CO₂ emissions, and replaces conventional fossil fuels with recycled materials diverted from landfill.

It is most important to note, however, that the existence of a domestic steel industry was a key factor in developing this technology. While UNSW was able to conduct laboratory testing and research, the collaboration with OneSteel allowed for industrial testing and eventual commercialisation. Without a domestic steel industry, the progression of UNSW research would have proved far more complicated, and Australia would not have received the initial benefit.

Arrium is also the Steel Industry Partner in the Australian Research Council Training Centre for Advanced Manufacturing of Prefabricated Housing, based at the University of Melbourne. The Centre aims to unlock the potential for growth of Australia's prefabricated building industry, and has been established to create a \$15 billion prefabricated housing sector in Australia within five years. The potential economic, employment and social outcomes from this venture are considerable, and again facilitated by the presence of a domestic steel industry in Australia.

Although a small producer of commodity steel, BlueScope is a global market-leader in value-added coated and painted steel products, with a profitable domestic and international business based on Australian-developed intellectual property and technology. It is the third largest manufacturer of painted and coated steels globally.

Innovation is a core element of BlueScope's strategy and the basis for the success of their coated and painted steel products business.

The company runs innovation and product development facilities at Port Kembla employing some 70 people, including approximately 30 PhD qualified scientists, and at Minchinbury employing a further 12 people.

Despite intense international competition, in 2014 BlueScope Steel resumed investing in new markets and developing new products.

A major recent innovation developed by the company is a new COLORBOND® steel coating technology, which has significantly boosted that product's performance and corrosion-resistance, while reducing its environmental footprint.

The addition of two magnesium compounds to the original zinc and aluminium coating improves the galvanic action of the zinc, and enables the aluminium in the coating to more actively protect the base steel. This is a world-first application for coated steel building products.

The new product has a longer lifespan and a lower environmental impact compared with previous-generation COLORBOND® steel. The new coating composition uses fewer metal coating materials, providing environmental benefits over previous generation COLORBOND® steel in a product that is 100 per cent recyclable.

Other features of the product include the inclusion of Thermatech® technology, which helps to reduce the amount of heat entering a building through the roof. COLORBOND® steel with ACTIVATE™ technology won the 'Innovation of the year' award at the 2014 Architecture & Design Sustainability Awards. It was jointly developed by BlueScope in partnership with Nippon Steel & Sumitomo Metal Corporation of Japan.

BlueScope – along with the Federal Government's Australian Research Council - is one of the major financial supporters of the Steel Research Hub at the University of Wollongong where further advancements are being made in BlueScope's products, manufacturing processes and mid-rise building construction. BlueScope are also a long-term supporter of the Science Centre & Planetarium.

The Steel Research Hub will be the centrepiece for collaborative steel research in Australia, striving to deliver breakthrough product and process innovations that will enable the Australian steel industry to compete on a global stage.

This ground-breaking initiative, which has attracted funding of \$12 million over five years, is testament to the critical importance of this industry in Australia, and

demonstrates the value that both industry and government place in collaborative, cross-disciplinary research.

Efficient design of buildings, customised products/chemistries/processes, & local warranties

Much work is being done by both Arrium and BlueScope to provide steels that can improve the design and therefore cost of both reinforced concrete and structural steel buildings.

In addition to creating jobs, investment, innovation and exports, a domestic steel industry provides a number of benefits for steel-consuming industries, such as the manufacturing and building & construction sectors, that imported steels cannot provide, or do not provide to the same extent. These benefits include:

- Manufacturing steel products to Australian and international standards, backed up by trusted testing and certification regimes.
- Developing and tailoring products for local environmental conditions, such as extremes of temperature (e.g. COLORBOND® steel with Thermatech® solar reflectance technology) or severe coastal and industrial environments (e.g. COLORBOND® Ultra steel).
- The ability to develop and customise products for individual customer demands.
- Provision of market-leading warranties, based on long-term local product testing regimes that imported steels generally cannot match.
- Technical and after-sales support, including a local research & development facility and a team of technical advisers across the country who visit customers 'on the ground' to provide expert advice.
- The ability to supply steel in smaller batches than importers typically require, and to manage inventory on behalf of customers.

Supply chain efficiencies

A domestic industry means manufacturers and constructors have security in knowing the products they need will be available through a flexible, secure and high-quality supply chain that cannot be matched by imports, which in turn leads to lower project costs.

If there was not a robust domestic industry, this is likely to lessen any price pressure on imports, resulting in higher prices.

When steel is manufactured locally, it is more likely to be fabricated, rollformed or otherwise further processed locally, because the cost of transport generally precludes Australian-made steel being shipped offshore for processing, then imported back to Australia as finished products. This generates jobs and economic activity in the downstream steel processing sector.

Local steel manufacturing also creates jobs in supporting sectors such as maintenance, engineering, environmental, accounting, banking, advisory and other services.

4. Policy issues for federal, state & local governments re the Australian Steel industry

Strategic support for a long term steel industry

For the reasons outlined above, a continuing local steel industry provides the foundation for competitiveness and innovation in manufacturing generally. Government stated policy support for the future will enable partnership planning and investment to secure these advantages.

BOSMA understands and acknowledges the Coalition Government's policy in relation to direct subsidies for corporations, but we believe there is much that public policy can do to help improve the sustainability and competitiveness of the domestic steel industry.

If the Government and the Parliament believe that the steel industry is an important industry for the country to maintain, this intent should then form the basis for policy and decision-making in a number of areas, including trade measures, procurement, workplace relations, taxation and environmental law.

Such a clear, comprehensive approach to the challenges facing the Australian steel industry will also help in the decision-making process for steelmakers - if we clearly understand the Government's intention, we can better undertake planning for the future.

GNP & infrastructure growth and local content procurement

Local content and procurement policies are generally the purview of the states and territories in Australia, with South Australia and Victoria leading the way in this regard. Involvement from other states and leadership from the Federal Government would be of significant benefit to Australian steelmakers.

BIS Shrapnel has estimated that a 90 per cent local steel content plan would add a cumulative \$1.3 billion to real GDP over the next five years, and only cost an average of \$61 to \$80m annually, or an extra 0.2 per cent of total construction costs for public projects.⁴

BOSMA understands the concerns on the part of the Federal Government regarding potential breaches of the WTO rulings in relation to local content. It is worth noting, however, the existing schemes in the US and Canada, among others, which manage to work within this context. Indeed, the *Australian Jobs Act 2013* already requires the preparation of Australian Industry Participation plans (AIPs) for major projects (defined as projects with an expenditure greater than \$500m). It is BOSMA's view

⁴ BIS p i

that the Federal Government could take a more active auditing role in ensuring the formation and compliance with AIPs for major projects. There is also the capacity for the Federal Government to take on a leadership role with the states in encouraging the formation and use of local content and procurement policies.

Anti-dumping/trade measures development

An effective anti-dumping system is a key element of the 'rules-based' international trade order, and important in underpinning support for trade liberalisation amongst manufacturers, their employees, unions and other stakeholders.

BOSMA appreciates the improvements to Australia's WTO-compliant anti-dumping system made by both the Coalition and ALP, with the support of minor party and independent Senators. These legislative changes, together with the establishment and resourcing of the Anti-Dumping Commission (ADC), have led to significant improvements in the effectiveness of Australia's anti-dumping system.

However, further changes are needed to ensure Australia's anti-dumping system is effective in redressing the injury caused by dumping. These are detailed above in section 2.

Innovation and R&D policy

Securing the future of the steel industry will not only have economic benefits for Australia, but will also enable Australian steelmakers to continue to improve and evolve. The Coalition Government has been very clear about its intention to make Australia an 'innovation nation', and a healthy domestic industry can both facilitate and participate in this bright future.

As demonstrated above, the lack of a domestic industry would have very real implications for Australia's research and development capacity. The steel industry is continually evolving to ensure it keeps pace with Australia's and the world's development.

Regulatory costs

We support Government efforts in reducing government-imposed regulatory costs, particularly in relation to energy, environment, transport & infrastructure, and taxation costs, each of which are important components of our cost base over which public policy can have a major impact.

Climate change & energy policy

As detailed above, policy to achieve Australia's emissions targets must not be 'one size fits all'. It must take account of our national circumstances and the differing technical and financial capabilities of each sector to reduce its emissions, as well as the sources of each sector's trade competition.

WTO and FTA policies

Free trade agreements should provide a framework for a freer and fairer trade environment with trading partners, ensuring that Australian steel producers can continue to grow and innovate in new market and product development, without injury caused by a surge of imports from a saturated global steel market.

Key concerns for BOSMA in bilateral and plurilateral trade agreements include maintenance of anti-dumping rights, staged tariff reductions for sensitive steel products, rules of origin, mechanisms to address subsidies and non-tariff barriers, product standards, and harmonisation of intellectual property arrangements.

An effective anti-dumping system is a key element of the 'rules-based' international trade order, and important in underpinning support for trade liberalisation amongst manufacturers, their employees, unions and other stakeholders.

The concept of 'fair' trade includes adherence to Australia's World Trade Organisation-compliant anti-dumping laws, as well as WTO-compliant policies to support the development of domestic industry

Third party certification to combat non-compliant products

BOSMA is not calling for increased regulation but support from Government of the systems already in place driven by industry need and with a proven track record. Frameworks such as this are well understood and accepted by competent steel mills worldwide, as Third Party Certificates of Product Compliance are already for them a low cost "reduced red tape" method of demonstrating compliance to Standards and correct test certificate data and identifying markings.

Thank you for the opportunity to make a submission to this Senate inquiry. Please do not hesitate to contact me if you have any questions about our submission. We will be pleased to answer any questions and provide further clarity.

Yours faithfully,

David Armston FAICD
Executive Director & Secretary